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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,260	08/02/2006	Carmen Kuhl	IHN.060.WUS	9609
76385 7590 04/08/2010 Hollingsworth & Funk 8500 Normandale Lake Blvd., Suite 320 Minneapolis, MN 55437				
EXAMINER SYED, NABIL H				
ART UNIT		PAPER NUMBER		
2612				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,260

Applicant(s)

KUHLE ET AL.

Examiner

/NABIL H. SYED/

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 1/19/06, 7/23/08

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9, 11-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amtmann et al. (US Pub 2005/0218230) in view of Charat et al. (7,098,770).

As of claims 1, 14, 17 Amtmann discloses a reader device for radio frequency identification transponder (via portable device 1 identifying data carrier 13; see abstract). Amtmann further discloses that portable device 1 communicates with data carrier 13 in a reader operation mode (see paragraph [0018]). Amtmann further discloses that the portable device 1 further comprises an associated transponder logic unit (via data carrier configuration 11; see fig. 1). Amtmann further discloses that the data carrier configuration (transponder logic unit) is provided and designed for contactless communication with at least one communication station 14 (other readers) external to the portable device 1 (see paragraph [0018]; also see fig. 1).

However Amtmann fails to explicitly disclose that the portable device (reader device) uses a single radio frequency interface and antenna in both operating modes.

Charrat discloses a contact-less integrated circuit reader, which operates in a reader mode to read data from integrated circuit tags CIC (transponder, see fig. 2) and the reader RD1 also operates in a passive mode in which it functions as an integrated circuit tag (see col. 2, lines 29-37). Charrat further discloses that the reader RD1 comprises a radio frequency interface (via modulator MDC1 and data extraction circuit EXTC1) and an antenna (via antenna LCR1; see fig. 2). Charrat discloses that the reader RD1 communicates with the integrated circuit CIC (transponder) and other readers RD2 using the antenna LCR1 (see col. 3, lines 30-42; also see fig. 2).

From the teaching of Charrat it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Amtmann to include the step of using a radio frequency interface and antenna to communicate with other readers and transponder as taught by Charrat in order to use less components in the reader circuitry hence reducing the size of the circuitry used in the portable device.

As of claims 2, 15 and 18, Amtmann discloses that the portable device 1 comprises a communication station configuration 10 which allow for operating in reader operation mode (see paragraph [0018]). Charrat further discloses that the RD1 reads other integrated circuit tags, hence comprising a reader logic unit (see col. 6, lines 46-67).

As of claims 3 and 20, Charrat discloses that when reader RD1 operates in a passive mode (transponder mode), it simulates the operation of a contact-less integrated

circuit and reader RD1 transmit data to other reader RD2 by disturbing a magnetic field generated by another device to transmit data by inductive coupling (see col. 12, lines 40-46), so reader operates in a passive mode without any power supply. Charrat further discloses that the magnetic field FLD1 sent by the reader RD1 causes an induced voltage to appear at the terminal of the coil of an integrated circuit and that voltage is used to supply power to the circuit of the integrated circuit (see col. 7, lines 3-10). So it would have been obvious to one having ordinary skill in the art that when reader RD1 operates in a passive mode, and inductively couples with another reader it generates power from the received magnetic field FID2 (see fig. 2) in order to reduce power consumption of the battery of the reader RD1.

As of claim 4, Charrat discloses that reader RD1 operates in a passive operating mode in which it simulates the operation of a contact-less integrated circuit (transponder) to converse with another reader.

As of claims 5-8, 21 Amtmann discloses that the data carrier configuration 11 (transponder logic unit) comprises a non-volatile memory 30 (see fig. 1; also see paragraph [0020]), since the memory is non-volatile, and it is well known that non-volatile memory includes read-only memory, so the data carrier configuration 11 will act as a read-only transponder. Amtmann further discloses that data content received from external communication station 14 can be stored in the memory 30, so the memory 30 can be designed as a configurable memory (see paragraph [0020]).

As of claims 9 and 22, Amtmann discloses that activation means 33 selects one of the two configurations of the portable device, namely data carrier configuration 11

(transponder logic) and communication station configuration 10 (reader logic) (see paragraph [0023]). Hence comprising the switch unit as claimed in present claims. Chartat further discloses that a switch can be used to switch the reader RD1 into passive operating mode (see col. 8, lines 33-44).

As of claims 11 and 24, Charrat discloses that the modulation circuit MDC1 and extraction circuit EXTC1 (radio frequency interface) is adapted to provide signals required for operation of reader RD1 in reader operation mode and in transponder operation mode (see col. 6, lines 5-40).

As of claims 12, 13 and 25, Amtmann discloses that the portable device 1 supports near field communication standard, wherein reader device is operable with a passive communication mode and in active communication mode is reader operation mode (via portable device 1 communicating with other reader devices/external communication station 14 and communicating with other tags 13; see fig. 1; also see paragraph [0021]). Amtmann further discloses that the portable device is operable with a show communication mode in transponder operation mode (via data carrier configuration 11 receiving signals from external communication station and transmitting a reply back). Further the reader device RD1 in Charrat is also operable in a passive communication mode while operating in a reader mode and reader RD1 is operable with a show communication mode in transponder operation mode (see col. 2, lines 30-45).

As of claim 16, 19, 26 and 27, Amtmann discloses that the portable device 1, is in the form of a cell phone, so the device is able to communicate via a public land mobile network (see paragraph [0015]).

3. Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amtmann et al., Charrat et al. and further in view of Philipsson (US Pub 20010007815).

As of claims 10 and 23, even though it can be seen that the reader RD1 in Charrat will operate autonomously in transponder operating mode, during periods of time when reader device is not energized, because Charrat discloses that when reader RD1 operates in a passive mode (transponder mode), it simulates the operation of a contactless integrated circuit and reader RD1 transmits data to other reader RD2 by disturbing a magnetic field generated by another device to transmit data by inductive coupling (see col. 12, lines 40-46), so reader operates in a passive mode without any power supply.

In order to further support the Examiner's assertion, Philipsson discloses a mobile communication device 10 (see fig. 2), which comprises a transponder logic unit 22. Philipsson further discloses that the transponder is a passive radio frequency transponder that rectifies energy from the received interrogation signal (see paragraph [0022]). Further from fig. 2 it can be seen that transponder does not receive power from battery of the communication device 10. So the communication device 10 will be able to operate autonomously in transponder operation mode even when the communication device is not energized, because the transponder will be able to utilize the energy from the interrogation signal for supplying its operation.

From the teaching of Philipsson it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the functionality of

passive transponder in the reader as taught by Philipsson in order to reduce power consumption of the battery of the mobile/portable device.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /NABIL H. SYED/ whose telephone number is (571)270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571)272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NABIL H SYED/
Examiner
Art Unit 2612

N.S

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612